

WHAT IS CLAIMED IS:

1. A hyper-media information providing method comprising:

5 acquiring object region information items  
corresponding to a plurality of object regions  
appearing in a motion video and relevant information  
items concerning at least several of the object region  
information items;

10 reconstructing at least several of the object  
regions corresponding to the object region information  
items;

displaying the reconstructed object regions in  
list form;

15 selecting at least one object region from the  
object regions displayed in list form; and

displaying one relevant information item of the  
relevant information items that concerns the object  
region selected.

20 2. The method according to claim 1, which  
includes combining the selected object region with the  
relevant information item corresponding thereto and  
displaying a composite result of the selected object  
region and the corresponding relevant information item.

25 3. The method according to claim 1, wherein  
displaying the reconstructed object regions includes  
displaying the reconstructed object regions on a first  
window of a display unit and displaying the relevant

information item includes displaying the relevant information item on a second window of the display unit.

4. The method according to claim 3, wherein  
5 displaying the reconstructed object regions includes displaying the reconstructed object regions corresponding to all object regions of the motion video on the first window.

5. A hyper-media information providing method  
10 comprising:

acquiring object region information items  
corresponding to a plurality of object regions  
appearing in a motion video and relevant information  
items concerning at least several of the object region  
15 information items;

displaying the object regions and a pointer for  
specifying at least one of the object regions on a  
display unit;

changing a display state of the object regions  
20 having the relevant information items according to a position of the pointer.

6. The method according to claim 5, wherein the  
changing includes displaying a display area other than  
the object regions having the relevant information  
25 items with the display state different from that of the object regions when the pointer is inside a window displayed on the display unit for displaying the motion

video.

7. A hyper-media information providing method comprising:

5 acquiring object region information items  
corresponding to a plurality of object regions  
appearing in a motion video and condition information  
concerning a display condition of the object regions;  
and

10 displaying and concealing selectively the object  
regions according to the display condition.

8. A hyper-media information providing method comprising:

15 acquiring object region information items  
corresponding to a plurality of object regions  
appearing in a motion video and condition information  
concerning a display condition of the object regions;

20 managing objects of the object regions together  
with features of each of the objects hierarchically  
with a plurality of layers including a first layer and  
a second layer lower than the first layer; and

displaying, when displaying the first layer  
according to the display condition, the second layer.

9. A hyper-media information providing method comprising:

25 acquiring object region information items  
corresponding to a plurality of object regions  
appearing in a motion video and relevant information

items concerning at least several of the object regions;

displaying selectively a first list of objects obtained by reconstructing at least several of the object regions corresponding to the object region information items and a second list of the relevant information items of the object regions;

selecting one of the object regions from the first list or one of the relevant information items from the second list;

playing back scenes including the selected one of the object regions or an object region corresponding to the selected one of the relevant information items.

10. A hyper-media information providing method comprising:

acquiring object region information items corresponding to a plurality of object regions appearing in a motion video;

displaying the motion video and a pointer for specifying at least one of the object regions; and

changing a playback speed of the motion video according to a display position of the pointer.

11. A hyper-media information providing method comprising:

acquiring object region information items corresponding to a plurality of object regions appearing in a motion video and relevant information

items concerning at least several of the object regions;

displaying the object regions when playing back the motion video;

5 specifying at least one object region of the object regions appearing in the frames; and

displaying one of the relevant information items that concerns the specified object region even if the object region is specified in an interval between a  
10 current frame and its M-frame preceding frame.

12. A hyper-media information providing method comprising:

acquiring object region information items corresponding to a plurality of object regions  
15 appearing in a motion video;

designating the object regions selectively; and  
determining a display region of the motion video and an enlargement / reduction ratio according to a designated object region and size information of a  
20 display unit of a terminal.

13. A hyper-media information providing apparatus comprising:

a motion video output unit configured to output a motion video;

25 an object information output unit configured to output object region information items corresponding to a plurality of object regions included in the motion

video and relevant information items concerning at least several of the object region information items;

5 a reconstruction unit configured to reconstruct at least several of the object regions corresponding to the object region information items;

a display to display the reconstructed object regions in list form; and

10 a selector to select at least one object region from the object regions displayed in list form, and the display displaying one relevant information item of the relevant information items that concerns the object region selected.

14. The apparatus according to claim 13, which includes a composite unit configured to combine the  
15 selected object region with the relevant information item corresponding thereto and output a composite result of the selected object region and the corresponding relevant information item to display the composite result on the display.

20 15 The apparatus according to claim 13, wherein the display displays a first window for displaying the reconstructed object regions and a second window for displaying the relevant information item.

25 16. The apparatus according to claim 15, wherein the display displays the reconstructed object regions corresponding to all object regions of the motion video on the first window.

17. A hyper-media information providing apparatus comprising:

a motion video output unit configured to output a motion video;

5        an object region information output unit configured to output object region information items corresponding to a plurality of object regions included in the motion video and relevant information items concerning at least several of the object region  
10        information items;

a display to display the object regions and a pointer for specifying at least one of the object regions;

15        a change unit configured to change a display state of the object regions having the relevant information items according to a position of the pointer.

18. The apparatus according to claim 17, wherein the change unit changes the display state to display a display area other than the object regions having the  
20        relevant information items with the display state different from that of the object regions when the pointer is inside a window displayed on the display unit for displaying the motion video.

19. A hyper-media information providing apparatus  
25        comprising:

a motion video output unit configured to output a motion video;

an object region information output unit  
configured to output object region information items  
corresponding to a plurality of object regions included  
in the motion video and condition information

5 concerning a display condition of the object regions;  
and

a display unit configured to display and conceal  
selectively the object regions according to the display  
condition.

10 20. A hyper-media information providing apparatus  
comprising:

a motion video output unit configured to output a  
motion video;

15 an object region information output unit  
configured to output object region information items  
corresponding to a plurality of object regions included  
in the motion video and condition information  
concerning a display condition of the object regions;

20 a management unit configured to manage objects of  
the object regions together with features of each of  
the objects hierarchically with a plurality of layers  
including a first layer and a second layer lower than  
the first layer; and

25 a display unit configured to display, when  
displaying the first layer according to the display  
condition, the second layer also.

21. A hyper-media information providing apparatus



comprising:

a motion video output unit configured to output a motion video;

an object region information output unit  
5 configured to output object region information items corresponding to a plurality of object regions included in the motion video and relevant information items concerning at least several of the object regions;

a display unit configured to display selectively a  
10 first list of objects obtained by reconstructing at least several of the object regions corresponding to the object region information items and a second list of the relevant information items of the object regions;

15 a selector to select one of the object regions from the first list or one of the relevant information items from the second list;

a playback unit configured to play back scenes including the selected one of the object regions or an  
20 object region corresponding to the selected one of the relevant information items.

22. A hyper-media information providing apparatus comprising:

a motion video output unit configured to output a  
25 motion video;

an object region information output unit configured to output object region information items

corresponding to a plurality of object regions included in the motion video;

5 a display unit configured to display the motion video and a pointer for specifying at least one of the object regions; and

a change unit configured to change a playback speed of the motion video according to a display position of the pointer.

10 23. A hyper-media information providing apparatus comprising:

a motion video output unit configured to output a motion video including a plurality of frames;

15 an object region information output unit configured to output object region information items corresponding to a plurality of object regions included in each of the frames and relevant information items concerning at least several of the object regions;

a display unit configured to display the object regions when playing back the motion video;

20 a specifying unit configured to specify at least one object region of the object regions included in each of the frames of the motion video; and

25 displaying one of the relevant information items that concerns the specified object region even if the object region is specified in an interval between a current frame and its M-frame preceding frame.

24. A hyper-media information providing apparatus

comprising:

a motion video output unit configured to output a motion video;

an object region information unit configured to  
5 output object region information items corresponding to a plurality of object regions included in the motion video;

a designation unit configured to designate the object regions selectively; and

10 a determination unit configured to determine a display region of the motion video and an enlargement / reduction ratio according to a designated object region and size information of a display unit of a terminal.

25. A hyper-media information providing program  
15 stored in a computer readable medium, the program comprising:

means for instructing a computer to acquire object region information items corresponding to a plurality of object regions appearing in a motion video and  
20 relevant information items concerning at least several of the object region information items;

means for instructing the computer to reconstruct at least several of the object regions corresponding to the object region information items;

25 means for instructing the computer to display the reconstructed object regions in list form;

means for instructing the computer to select at

least one object region from the object regions  
displayed in list form; and

means for instructing the computer to display one  
relevant information item of the relevant information  
5 items that concerns the object region selected.